BACKGROUND

First language (L1) loss: A phenomenon characterized by losing previously acquired L1 skills during second language (L2) acquisition.

Children who experience L1 loss have a regressing foundation from which to build language and literacy skills necessary for academic achievement (Anderson, 2012).

Increased knowledge about the underlying features and patterns of L1 loss can benefit clinicians in differentiating it from a primary language impairment.

Code-switching (CS): Relatively balanced alternating or shifting between two languages during connected speech; considered a normal phenomenon (Goldstein, 2012).

Code-switching has been studied in bilingual children learning an L2, but a link to L1 loss has not yet been explored in depth (Guiberson, 2006).

PURPOSE

The proposed study will examine the proportion and directionality of CS patterns exhibited in English and Spanish as a potential index of L1 loss in bilingual preschoolers.

Findings from this preliminary study will help to clarify the potential utility of CS as a measure of L1 loss.

The mean proportion of CS is expected to be significantly higher when the target language is Spanish (CS in English), relative to when the target language is English (CS in Spanish), thus indicating CS unidirectionality during L1 production and potential L1 loss.

METHODS

Longitudinal data were collected from 39 Spanish-English bilingual children attending an English immersion preschool over four consecutive semesters (waves).

Four wordless picture storybooks (Mayer, 1969; 1974; 1975a; 1975b) were used to elicit Spanish and English narrative retell language samples, which were coded for CS words using SALT software (Miller & Iglesias, 2012).

Storybook order and target language were counterbalanced over time.

CS Examples

Target language English: The niño[CS] had another rana[CS].

Target language Spanish: No miró in[CS] su boot[CS].

The mean proportion of CS words in the bilingual samples was utilized to examine the longitudinal proportion and directionality of occurrence of this phenomenon.

Paired sample t-tests and effect sizes (Cohen’s d) were conducted (a) within-language (proportion of children using CS across four waves of observation) and (b) across-language (mean proportion of CS use within each wave of observation) to test the clinical significance of changes observed.

RESULTS

The paired sample t-tests comparing percent of CS in waves over time within each language were non-significant with small effect sizes.

The proportion of children using CS during narrative retells increased in Spanish and decreased in English over time.

The paired sample t-tests of the proportion of CS used within languages over time yielded results that approached significance with small to medium effect sizes.

Proportion of children that CS during Spanish retell samples: t(22) = -1.70, p = .10, d = -.42.

Proportion of children that CS during English retell samples: t(32) = 2.03, p = .05, d = .52.

The cross-linguistic comparisons of CS at each wave of observation were significant (see Table 1), with effect sizes ranging from medium (d = .77) to (d = 1.14) large.

DISCUSSION

Although there was little change in CS over time within each target language, there was significantly more CS use in Spanish retells (unidirectionality) at each wave of observation.

Future analyses should take into account the ways in which CS is being used, as well as, the grammar and vocabulary of the children using it.

SELECTED REFERENCES

